

Abdominal aortic aneurysm

Definition

An abdominal aortic aneurysm is when the large blood vessel that supplies blood to the abdomen, pelvis, and legs becomes abnormally large or balloons outward.

Alternative Names

Aneurysm - aortic; AAA

Causes

The exact cause is unknown, but risk factors for developing an aortic aneurysm include:

- Smoking
- High blood pressure
- High cholesterol
- Male gender
- Emphysema
- Genetic factors
- Obesity

An abdominal aortic aneurysm can develop in anyone, but is most often seen in males over 60 who have one or more risk factors. The larger the aneurysm, the more likely it is to rupture and break open.

Symptoms

Aneurysms develop slowly over many years and often have no symptoms. If an aneurysm expands rapidly, tears open (ruptured aneurysm), or blood leaks along the wall of the vessel (aortic dissection), symptoms may develop suddenly.

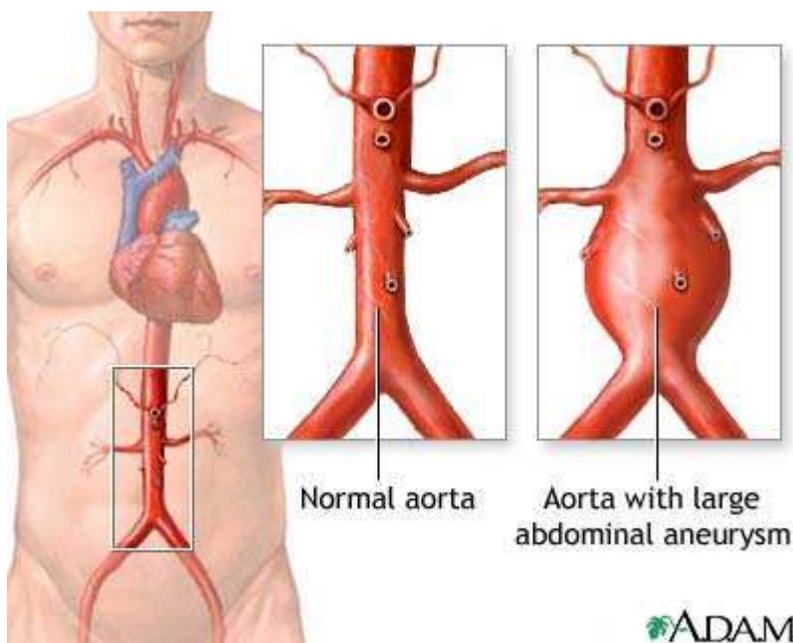
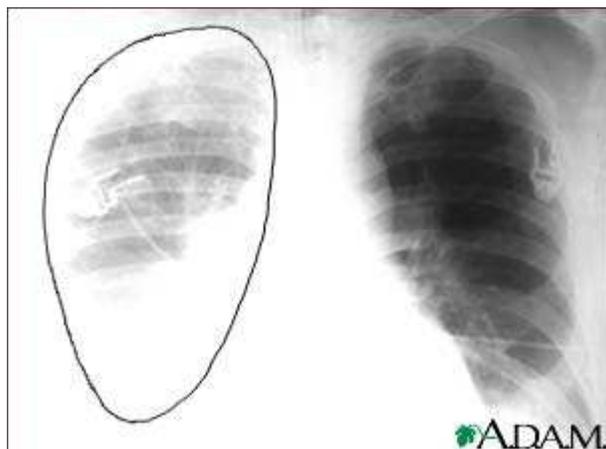
The symptoms of rupture include:

- Pain in the abdomen or back -- severe, sudden, persistent, or constant. The pain may radiate to the groin, buttocks, or legs.
- Clammy skin
- Nausea and vomiting
- Rapid heart rate
- Shock

Exams and Tests

Your doctor will examine your abdomen. The exam also will include an evaluation of pulses and sensation in your legs. The doctor may find:

- Abdominal mass
- Stiff or rigid abdomen
- Pulsating sensation in the abdomen



You may have an abdominal aortic aneurysm that is not causing any symptoms or problems. Your doctor may have found out about this problem from special tests called ultrasound of the abdomen or CT scan of the abdomen.

Either of these tests may be done when you're having symptoms.

Treatment

If you have bleeding inside your body from an aortic aneurysm, you will have open abdominal aortic aneurysm repair.

If the aneurysm is small and there are no symptoms:

- You and your doctor must decide whether the risk of having surgery is smaller than the risk of bleeding if you do not have surgery.
- Your doctor may recommend checking the size of the aneurysm with a yearly ultrasound test, to see if the aneurysm is getting bigger.

Surgery is usually recommended for patients who have aneurysms bigger than 2 inches or 5.5 cm across and aneurysms that are growing quickly. The goal is to perform surgery before complications or symptoms develop.

There are two approaches to surgery:

- In a traditional (open) repair, a large cut is made in your abdomen. The abnormal vessel is replaced with a graft made of man-made material, such as Dacron.
- The other approach is called endovascular stent grafting. This procedure can be done without making a large cut in your abdomen, so you may get well faster. Endovascular repair is rarely done for a leaking or bleeding aneurysm.

Outlook (Prognosis)

The outcome is usually good if an experienced surgeon repairs the aneurysm before it ruptures. However, less than 40% of patients survive a ruptured abdominal aneurysm.

Possible Complications

When an abdominal aortic aneurysm ruptures, it is a true medical emergency. Aortic dissection occurs when the innermost lining of the artery tears and blood leaks into the wall of the artery. This most commonly occurs in the aorta within the chest.

Complications include:

- Arterial embolism
- Heart attack
- Hypovolemic shock
- Kidney failure
- Stroke

When to Contact a Medical Professional

Go to the emergency room or call 911 if you have pain in your belly or back that does not go away or is very bad.

Prevention

To reduce the risk of developing aneurysms:

- Eat a heart-healthy diet, exercise, stop smoking (if you smoke), and reduce stress to help lower your chances of having a blocked artery again.
- Your health care provider may give you medicine to help lower your cholesterol.
- If you were given medicines for blood pressure or diabetes, take them as your doctor has asked you to.

Men over age 65 who have ever smoked should have a screening ultrasound performed once.

References

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